

United States Government

Department of Energy

# memorandum

DATE: January 28, 2004

REPLY TO  
ATTN OF: Office of Pollution Prevention and Resource Conservation (EH-43):Coalgate:6-6075

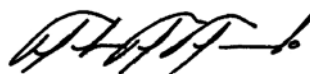
SUBJECT: EPA Proposed Rule: *Revisions to the Definition of Solid Waste* – Extension of the Comment Period

TO: Distribution

The purpose of this memorandum is (a) to inform Department of Energy (DOE) elements of the Environmental Protection Agency (EPA) decision to extend the comment period for the “Revisions to the Definition of Solid Waste” proposed rule, and accordingly, (b) to offer DOE elements the opportunity to submit any additional comments in response to the proposed rule. For your information, both the proposed rule (October 28, 2003; 68 *FR* 61558) and the comment period extension notice (December 29, 2003; 68 *FR* 74907) are available at: <http://www.epa.gov/epaoswer/hazwaste/dsw/abr.htm>.

As discussed in the EH-43 notification memorandum in regard to the proposed rule,<sup>1</sup> EPA is proposing to exclude certain hazardous secondary materials from the Resource Conservation and Recovery Act (RCRA) definition of solid waste. Specifically, certain materials that are generated and reclaimed in a continuous process within the same industry would no longer be regulated as RCRA hazardous wastes. In addition, EPA is proposing to establish regulatory criteria for assessing “legitimate recycling” of hazardous secondary materials.

EH-43 is in the process of developing a consolidated DOE response to the proposed rule. A copy of the current draft response is attached for your consideration. If you would like to submit any additional comments in regard to the proposed rule, please provide them to Jerry Coalgate of my staff (e-mail [jerry.coalgate@eh.doe.gov](mailto:jerry.coalgate@eh.doe.gov)) by Monday, **February 9, 2004**. In developing your comments, please indicate the specific section and page of the preamble or proposed regulations to which each comment pertains. Questions regarding the proposed rule, or the effort to develop consolidated DOE comments, should be directed to Mr. Coalgate at (202) 586-6075.



Thomas T. Traceski  
Director  
Office of Pollution Prevention  
and Resource Conservation

Attachment

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<sup>1</sup> See EH-43 Memorandum, Subject: *EPA Proposed Rule: Revisions to the Definition of Solid Waste*, October 31, 2003. <http://homer.ornl.gov/oepa/comments/rcra/defswrequest.pdf>

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**National Nuclear Security Administration**

<http://homer.ornl.gov/oepa/comments/rcra/defswrequest.pdf>

**THRU: James J. Mangeno, Senior Advisor for Environment, Safety and Health**

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Manager, Livermore Site Office  
Manager, Nevada Site Office  
Manager, Y-12 Site Office  
Manager, Savannah River Site Office  
Manager, Los Alamos Site Office  
Director, NNSA Service Center, Albuquerque  
Deputy Administrator for Defense Programs  
Deputy Administrator for Nuclear Nonproliferation  
Associate Administrator for Infrastructure and Security  
Associate Administrator for Management and Administration

**cc: Other Organizations**

Hazardous Waste Remedial Action Program, (HAZWRAP)  
Center for Environmental Management Information

**United States Department of Energy**  
**Comments On**  
**Revisions to the Definition of Solid Waste; Proposed Rule**  
**(68 FR 61558-61599; October 28, 2003)**

**GENERAL COMMENTS**

The Department of Energy (DOE) supports efforts, as reflected in this proposal, by the Environmental Protection Agency (EPA) to promote the conservation and safe, beneficial reuse of valuable secondary hazardous materials. This regulatory initiative is consistent with EPA's longstanding policy of encouraging the recovery and reuse of valuable resources as an alternative to land disposal. DOE also agrees with EPA that the proposal is consistent with one of the primary goals Congress established when enacting the Resource Conservation and Recovery Act (RCRA), and is encouraged by EPA's vision of how the RCRA program should evolve over the long term with respect to sustainability and more efficient use of resources (Page 61560, Column 2). Finally, DOE commends EPA for continuing to explore whether further initiatives aimed at encouraging legitimate recycling of hazardous secondary materials are warranted (Page 61560, Column 3).

In general, DOE supports measures in the proposed rule to (a) revise the definition of solid waste to identify certain recyclable hazardous secondary materials as not being discarded and therefore excluded from RCRA Subtitle C regulatory requirements; and (b) establish specific regulatory criteria for determining when recycling is legitimate. While generally supporting the proposal, DOE has identified certain concerns and issues that can be broadly summarized as follows:

- Overall, DOE believes recycling should be encouraged more extensively. The proposed rule would exclude certain secondary materials from the hazardous waste requirements, but the exclusion is limited to the reclamation and reuse of secondary materials in a continuous process within the same industry. DOE believes that consideration should be given to extending the exclusion to the reclamation of secondary materials by any establishment, unless there is distinct evidence of threats to human health and the environment. The reclamation of secondary materials could generally be excluded, regardless of location or industrial classification, as long as the reclaimed materials could be legitimately reused in a subsequent production process.
- With respect to alternatives for determining when materials are reused within an ongoing industrial process by the generating industry, DOE considers the approach in the proposed rule, which relies on the North American Industry Classification System (NAICS), to be overly restrictive. DOE is responsible for a large number of complex federal facilities at which intra- and inter-establishment recycling occurs and is encouraged, but activities at many of its facilities might not qualify for exclusion under the proposed rule due to the NAICS classification approach. In addition, DOE believes that materials can be legitimately and safely recycled between different industries, and between DOE and private industry, regardless of NAICS classification and location. Rather than the proposed approach, DOE prefers a broader reliance on the four criteria of legitimate recycling (the "legitimacy

criteria", as discussed beginning on Page 61582, Column 2) as the best means to promote and encourage the use and reuse of secondary and other recyclable materials.

These broader concerns and related issues are discussed in more detail in the following Specific Comments.

## **SPECIFIC COMMENTS**

### **II.F. What Is the Scope of Today's Proposed Rule?**

**1. Page 61564, Column 2: Under the proposed rule, hazardous secondary materials generated and reclaimed in a continuous process *within the same industry* (emphasis added) would no longer be subject to the RCRA Subtitle C hazardous waste management regulations. As proposed, 40 CFR 261.2(g)(2) would require that reclamation of excluded materials within the generating industry must produce a product or ingredient that can be used or reused without any further reclamation. The preamble notes that this requirement “is intended to prevent situations where excluded materials might be only partially reclaimed within the generating industry, and then sent to a different industry for one or more “final” reclamation steps.”**

DOE suggests that there are situations where additional reclamation in another “industry” (based on the NAICS classification system as discussed in the proposed rule) would be appropriate. An originating facility might not have the capability to completely reclaim a material for reuse, while another facility that has a different industrial classification under NAICS could safely finish reclaiming the material. For example, many types of hazardous materials are generated during decommissioning and deactivation of formerly used facilities, and recycling of these materials is conducted for waste minimization and to decrease disposal costs. Recyclables are generated and may be “partially reclaimed” during decommissioning and deactivation. Normally these recyclables are not reintroduced into a process within the same generating industry; typically they are turned over to a commercial recycler who then sorts and reclaims or finds reusers for these materials. As another example, various DOE research facilities may partially reclaim laboratory solvents that are not reagent grade, and then provide these solvents for further reclamation (e.g., solvent recovery still) to a different facility at the same site (or to a different DOE site) for use in parts cleaning, vehicle service, or painting. Out-of-industry and multi-phase reclamation processes should be encouraged whenever there is no indication of an increase in risk or potential release to the environment, and should not depend on whether the reclaimed material originated from a different site or whether industries with different NAICS classifications are involved in the reclamation.

### **III.A.4. What is Meant by a “Continuous Process Within the Same Industry?”**

**1. Page 61565, Column 3 – Page 51566, Column 1: Under Co-Proposal Option #1, “hazardous secondary materials would have to be generated and reclaimed within a single industry in order to qualify for the exclusion.” Under Option #2, “hazardous secondary materials that are generated and reclaimed in a continuous process within the same**

**industry would not be eligible for the exclusion if the reclamation takes place at a facility that also recycles regulated hazardous wastes generated in a different industry.”**

In general, DOE supports neither Option 1 nor Option 2, because both options unduly restrict reclamation between facilities with different NAICS classifications. Under either option, reclamation activities at larger, complex sites, such as those operated by DOE, would not qualify for exclusion if the reclaimed materials were not reused within a single industry. DOE recommends that rather than restricting these activities, reclamation across industries should be encouraged, provided that proper management techniques are followed and waste releases, sham recycling, and other inappropriate practices are not occurring.

If either of the two options is adopted in the final rule, DOE has a preference for Option 1 over Option 2. Option 2 is the least preferred because it places a burden on the initial generator to ensure that the receiving facility: 1) has the same NAICS code; and, 2) has a system in place to exclude receipt of recyclable material/waste from industries with a different NAICS code. This is a task that smaller generators in particular may find discouraging. Furthermore, Option 2 appears to discourage using commercial recycling facilities that handle wastes from multiple industries (regardless of potential similarities in reclamation processes or materials reclaimed). Instead, this option would tend to promote many specialized reclamation centers (either on- or off-site), each one focusing on a single industry classification. Limiting the proposed exclusion as stated would be a disincentive to centralized waste reclamation facilities. Such facilities are likely to be easier to monitor and oversee, tend to concentrate and provide more knowledgeable support to generators seeking recyclers, and (through associations, competition, insurance carriers, government oversight, and other means) tend to be more responsible and better financed. Finally, it makes little sense to encourage (as Option 2 does) devoted reclaimers for each type of industry when different industries may generate very similar wastes with common reclamation techniques that commercial reclaimers can often provide.

It is not clear in the preamble discussion (nor in the wording for proposed 40 CFR 261.2(g)(2), both Option 1 and Option 2, at Page 61595) whether reclamation occurring in multiple processing steps or locations (within the same industry) must produce a “product or ingredient that can be used or reused without any further reclamation”:

- 1) during each step or at each location involved in the reclamation process; or
- 2) only at the conclusion of the overall reclamation process.

DOE prefers that the requirement to produce a product or ingredient for use or reuse be applied only to the overall reclamation process (rather than to each intermediate step), and requests that the intent regarding this requirement be clarified in the final rule.

### **III.A.6. How is EPA Proposing To Define “Industry?”**

**1. Page 61567, Column 3: The proposed rule relies on using the NAICS to define industries for determining whether recycling is occurring within the same generating industry. The preamble also notes that the NAICS should be used because “the developers**

**of the NAICS are more familiar with many of these diverse operations, and the NAICS list is also well known and widely accepted by industry.”**

DOE is concerned that the NAICS system does not provide adequate classifications, or guidance on making such classifications, to cover the range of activities conducted within the DOE complex. The following is only a sample of four-digit NAICS classifications that might apply to activities conducted at various DOE facilities:

- 2211 Electric Power Generation, Transmission and Distribution
- 5415 Computer Systems Design and Related Services
- 5417 Scientific Research and Development Services
- 5622 Waste Treatment and Disposal
- 5629 Remediation and Other Waste Management Services
- 9241 Administration of Environmental Quality Programs
- 9261 Administration of Economic Programs
- 9281 National Security and International Affairs

While the preamble recognizes that there are cases where distinctly different and potentially significant activities may occur at one location (Page 61572), the proposed rule does not address the best manner in which to deal with hazardous secondary materials generated at these locations. As indicated in the preamble (Page 61572, Column 2), the 2002 NAICS Manual states that an “activity is treated as a separate establishment provided: (1) No one industry description in the classification includes such combined activities; (2) separate reports can be prepared on the number of employees, their wages and salaries, sales or receipts, and expenses; and (3) employment and output are significant for both activities.” At many DOE sites there are two or more facilities dedicated to completely different “industries” as classified under the NAICS. Depending on how these activities are classified, using the NAICS (as the sole discriminator for defining the “same generating industry”) may discourage recycling within the DOE complex, or between DOE and commercial facilities.

For example, under the proposed rule spent solvents from research laboratories (NAICS 5417) could not be reclaimed and reused in the motor vehicle shop of a power generation facility (NAICS 2211), even if these activities occur within a few miles of each other on the same DOE site. Such an example would probably not be unique to DOE. As a second example, essentially any secondary materials produced within the Public Administration classification (NAICS Sector 92) could not be excluded for reclamation and reuse by any commercial enterprise. Thus, for instance, the exclusions under the proposed rule would not apply if the motor pool or facilities maintenance for a NAICS Sector 92 government entity (e.g., air national guard, Federal Aviation Administration) at an airport, and the entity responsible for operating the airport (NAICS classification 4881), co-reclaimed essentially identical secondary materials (such as degreasers and paint solvents) at the same airport. Many federal installations, government owned/contractor operated sites, and large industrial facilities could reasonably be expected to encounter similar problems with assigning NAICS classifications that effectively prevent inter-industry recycling even at the same location.

DOE believes that while the NAICS approach to defining “within the same industry” may be relevant for moderate to small industries, it is not useful for large, complex, and/or highly integrated federal or commercial sites. The proposed approach will either discourage reclamation of materials within large or complex industries (both federal and commercial establishments), or will encourage those responsible for complex and/or multiple establishments to take liberties in assigning NAICS classifications (to enable the claim that reclamation is within the same industry). The latter path raises a question with regard to how EPA will assess decisions about self-assigned NAICS classifications. DOE is concerned that for oversight purposes, EPA will find itself in the role of deciding whether a NAICS classification has been properly (versus conveniently) assigned, a function which is acknowledged in the preamble (Page 61568, Columns 2 and 3) as best left to the owners of facilities and the interpretation of the Office of Management and Budget.

**2. Page 61571, Column 2: Waste Management and Remediation Services (NAICS 562) would be excluded from taking advantage of the recycling provisions in the proposed rule. The preamble indicates the basis for excluding NAICS 562 is “that this industry is in the business to manage waste, and presents different legal and policy issues than do traditional manufacturing industries”, and “that most if not all materials reclaimed in waste management operations are first discarded by another entity that has no further use for them.”**

Waste management and environmental remediation industrial activities are a significant aspect of the work at a number of DOE sites (e.g., Savannah River, Rocky Flats, Hanford). Depending on how the term “establishment” is applied (see the next comment) and whether multiple NAICS classifications may apply at a given site, many DOE sites could be in the NAICS 562 Sub-sector. Substantial opportunities exist for recycling wastes at these sites and many of these opportunities are being pursued, but under the auspices of the hazardous waste recycling regulations. These regulations add unnecessary costs to the work performed by site contractors for DOE and, given the level of controls and oversight already present, do not significantly improve human health and environmental protection. DOE believes that a blanket elimination of the NAICS 562 Sub-sector is not warranted for federal installations at which environmental remediation and cleanup are the primary activities. Allowing the proposed exclusion to be applied would act as an incentive to reclamation, and would further encourage recycling over disposal options. DOE recommends that the final rule allow federal installations to implement the recycling exclusions even though NAICS Codes 5621, 5622, and 5629 are the sole or primary industrial classifications. The final rule could accomplish this through a footnote to Appendix X to Part 261, or by including a provision allowing EPA to make site-specific exceptions on a case-by-case basis.

**3. Page 61572, Column 3: The NAICS (and associated guidance) provides a system for classifying establishments into particular industry groups and categories. Because the proposal relies on the NAICS, and the concept of establishment is considered to be critical to correctly applying the NAICS classification system, a definition for “establishment” is included in the proposed rule, where establishment means “an economic unit, generally at a single physical location, where business is conducted or where services or industrial operations are performed. An establishment is the smallest such unit for which records**

**provide information on the cost of resources, materials, labor, and capital employed to produce the units of output.”**

Under the proposed definition of “establishment”, most DOE sites would be a single establishment and thus would need to identify a single NAICS classification for the entire site. Yet, as noted above, at many DOE sites there are numerous distinct “industries” that could be ongoing at the same time, and new industries will arise in response to new missions, even as old industries come to an end. As proposed, the definition of “establishment” does not provide clear enough criteria to enable an entity responsible for complex sites, or that oversees multiple sites within a single complex, to consistently determine a NAICS classification for its site(s). DOE suggests that an alternative definition of “establishment” be included in the final rule for large, complex federal installations. The alternative definition could both: 1) allow the ability to assign multiple NAICS classifications at any single federal site; and, 2) consider all assigned classifications to be beneath a single “umbrella” establishment (e.g., DOE operations office) which would be considered as “the same generating industry” for purposes of the reclamation exclusion. This approach would simultaneously encourage on-site reclamation of excluded materials (even if multiple NAICS classifications are applicable at a single site), while also allowing wastes generated within identical NAICS classifications to be reclaimed at one or more different locations or facilities within the DOE complex.

**4. Page 61575, Column 1: The preamble notes that “several stakeholders suggested that an exclusion for on-site recycling could be a more practical and simpler approach to encouraging legitimate recycling while maintaining environmental protections” and that “such an option may have merit ... in light of the potential difficulties in making clear, definitive NAICS classifications at more complex facilities.” The preamble invites comments on “a regulatory option that could simplify implementation of today’s proposed exclusion in situations where materials are all generated and reclaimed in a continuous process on-site.”**

DOE agrees that this option would likely encourage more legitimate recycling than the proposed rule approach for intra-industry recycling, particularly at large and/or complex sites at which multiple related industries coexist (see preceding comment for further discussion of this subject). If this option is pursued further, DOE suggests that the term “continuous process” be further defined for purposes of implementation. For example, it would be important to clarify whether any process would be considered “continuous” as long as it occurred entirely on-site; or, whether the activities that comprise a “process” must share some demonstrably common industrial, commercial, or other relationship for the process to be considered “continuous”. In addition, DOE suggests that this option could be extended to include multiple sites under the control of a single entity, particularly when that entity is a federal or state government that is already charged with protecting human health and the environment. DOE can envision recycling opportunities where materials are transferred from the generating site to another location that has the reclaiming capabilities needed for a particular material. All DOE transportation and recycling activities, including those conducted by site contractors, are highly scrutinized to ensure they are conducted in a safe manner and to ensure proper transfer, receipt, delivery, and disposition. These activities should be encouraged not only “on-site”, but also where multiple-site recycling can be conducted safely. Thus, DOE would prefer an approach that does not rely solely on “on-



site” processes, and that would include allowances for reclamation within processes conducted within the same complex of installations under the control of a single federal entity.

### **III.A.7. How is EPA Proposing to Define “Continuous Process?”**

**1. Page 61575, Column 3 through Page 61576, Column 1: The preamble notes that a continuous process requires some limitations on timing of the reclamation and reuse of the reclaimed material. The proposed rule proposes using RCRA’s existing “speculative accumulation” provisions (see 40 CFR 261.1(c)(8)) to distinguish between processes that are continuous and those that are not. Under the proposed rule, “the person accumulating the material must show that during a calendar year (beginning January 1) the amount of material that is recycled, or transferred to a different site for recycling, must equal at least 75 percent by weight or volume of the amount of that material at the beginning of the period.”**

DOE is concerned that simply applying the speculative accumulation definition may be overly prescriptive. Many industrial processes (including DOE operations) are not run on a continual basis with a consistent level of output. Seasonal or cyclical production, planned or unplanned periods of shutdown, changes in enforceable milestones, or readjusted budgets can affect production levels and the generation of secondary materials. Each of these factors can potentially impact a generating industry’s ability to achieve the speculative accumulation standard, especially the requirement that at least 75% must be recycled in one year. DOE recommends that the final rule provide increased flexibility about the use of speculative accumulation for distinguishing continuous processes. For instance, the final rule should be clarified to ensure that the same year-by-year variance available for speculative accumulation of recyclable materials (under 40 CFR 260.31(a)) would be available for continuous processes that encounter impediments to achieving the 75% annual limit.

### **III.A.8. What Type of Notification Would Be Required?**

**1. Page 61577, Column 1 and Column 3: The proposed rule “would require generators who wish to use the 40 CFR 261.2(g) exclusion to submit a one-time notice to EPA or the authorized state” that would include information on “the type of material(s) that would be subject to the exclusion, and the industry that generated the material”. The preamble indicates that “as proposed, providing this notification would not be required more than once”, then requests comment on an alternative notification option under which “generators would be required to submit revised notices if certain information on the original notice were to change.”**

DOE considers the approach in the proposed rule to be sufficient for purposes of notifying EPA or an authorized state that a person is reclaiming and reusing secondary materials in a manner that is excluded from RCRA regulations. DOE concurs that such notification is essential to EPA’s (and the state’s) ability to ensure that sham recycling, unsafe reclamation activities, and other illegitimate practices are not occurring. However, DOE does not support an alternative, such as the option discussed in the preamble, that would require resubmittal of notifications due to changes in the secondary materials being recycled, or in the industries producing those

materials. Given the ever-changing variety of materials, industries, and reclamation practices across the DOE complex, such an alternative notification approach would simply be an additional paperwork burden providing no obvious benefits.

**2. Page 61577, Column 3: The proposed rule does not include a reporting requirement for persons using the 40 CFR 261.2(g) exclusion. The preamble invites comments on an option being considered that would require submittal of periodic (e.g., annual) reports detailing “recycling activities, to provide information on the types and volumes of materials recycled, where off-site shipments were sent, the types of reclamation processes used, the types of products produced from the reclamation processes, how residuals from reclamation processes were managed, and other relevant information.”**

DOE does not support requiring submittal of periodic mandatory reports on recycling activities excluded under this proposed rule (although gathering information on a voluntary basis would be useful for determining the success of the proposed rule and assessing ways to further promote recycling). If the final rule requires mandatory reporting, any such requirement should be no more burdensome than, and should be integrated with, current reporting obligations. For instance, reports should not be required any more frequently than hazardous waste reporting (e.g., biennial and not annual as suggested), and should include essentially the same information and detail that a facility would maintain to evidence/demonstrate a pollution prevention program.

### **III.A.10. How Would the Proposal Be Implemented and Enforced?**

**1. Page 61581, Column 1 and Column 2: Under the discussion of *Enforcement*, the preamble indicates that if a hazardous secondary material loses its exclusion, each person who manages that material “would have to manage it consistently with hazardous waste management requirements from the point when the material was first generated, regardless of whether the person is the one who actually causes the loss of the exclusion.” Thus, no matter where or how a material is not managed within the boundaries of the reclamation/reuse exclusion, “EPA and an authorized state could choose to bring an enforcement action against the reclaimer, transporter, and/or generator, for violations of applicable RCRA hazardous waste requirements.”**

The proposed enforcement position appears overly broad, and DOE is concerned that the approach as stated may create some unnecessary difficulties for the regulated community and, ultimately, the regulating agency. For instance, a transporter should not be expected to be held liable for errors made by either the generator or the receiving facility. A transporter would not be able to conduct evaluations of proper assignment of NAICS codes and/or whether the receiving facility accepts the same waste from other generators having different NAICS codes. Therefore, an enforcement action against a transporter (if different from the generator or the receiving facility) should not be pursued simply because a material loses its exclusion. DOE also suggests that some limitation on enforceability against generators be considered. DOE agrees that a generator should be responsible for verifying how their secondary materials will be recycled at the receiving facility. However, if the generator ships materials in good faith to a receiving facility and the exclusion is subsequently lost (e.g., for errors solely caused by the receiving facility, or because another generator with an erroneous NAICS classification sent a

waste to the facility), enforcement against that generator should not be pursued. DOE suggests that EPA provide further guidance regarding intent and clarifying how enforcement discretion will be exercised.

### III.B.1. What is Legitimate Recycling?

**1. Page 61582, Column 1: Guidance has been included in earlier preambles and other materials about what constitutes legitimate recycling under RCRA, but to date this guidance has not been codified. The preamble indicates that the proposed rule provides “a good opportunity to establish RCRA’s recycling legitimacy criteria in regulations, and at the same time to make clarifying revisions to them.” The preamble also expresses the belief “that the new codified regulatory criteria will, when applied to actual recycling scenarios, result in determinations that are consistent with those based on current guidance.”**

DOE supports the proposal to define legitimate recycling within the hazardous waste regulations, and generally favors the criteria as proposed. A few suggested clarifications to the criteria are provided below. Further (as noted also in DOE’s response to preamble section “IV. Request for Comment on a Broader Exclusion for Legitimate Recycling”, Page 61588), DOE recommends that these criteria be promulgated in lieu of the “continuous process within the same industry” approach set forth in the proposed rule.

### III.B.3. Today's Proposed Criteria for Legitimate Recycling.

**1. Page 61583, Column 3: “1. Criterion #1: The secondary material to be recycled is managed as a valuable commodity. Where there is an analogous raw material, the secondary material should be managed in a manner consistent with the management of the raw material. Where there is no analogous raw material, the secondary material should be managed to minimize the potential for releases into the environment.”**

DOE believes this criterion should be clarified in several ways. First, the criterion (as proposed) involves a comparison of secondary material to be recycled to analogous raw materials. DOE recommends that the scope of this criterion be expanded to include comparisons against analogous raw materials or products. In some cases, the secondary material to be recycled may more closely resemble an analogous product (such as an intermediate product) than a raw material. Second, the criterion as stated interjects a significant ambiguity when no analogous material (or product) exists, by requiring that the secondary material “be managed to minimize the potential for releases to the environment”. The proposed rule includes no basis for the regulated community to evaluate or interpret the “managed to minimize” element of this criterion. DOE suggests the criterion could be clarified by replacing the last sentence with the following or equivalent wording: “Where there is no analogous material, the secondary material should be managed in a manner consistent with its use as a valuable raw material or product and with generally accepted industrial management practices for comparable materials or products.” This alternative reduces the uncertainty of how to “minimize” releases, and clarifies that the management of secondary materials prior to recycling will be evaluated against the same standard as any other comparable material or product.

**2. Page 61585, Column 2 and Column 3: “3. Criterion #3: The recycling process yields a valuable product or intermediate that is: (i) Sold to a third party: or (ii) Used by the recycler or the generator as an effective substitute for a commercial product or as a useful ingredient in an industrial process. ... A recycler that has not yet arranged for a sale of its product to a third party could establish the value by demonstrating that it can replace another product or intermediate (process input) that is available in the marketplace.”**

DOE is concerned that as written in the proposed rule, Criterion #3 implies that a product needs to actually be sold or used as a condition of meeting the criterion. This does not appear to be consistent with the intent as discussed in the preamble (and with which DOE agrees) that recyclers who have not yet arranged for sale to a third party or have not yet used the material could still demonstrate they meet the criterion. DOE suggests revising the Criterion #3 language to clarify this intent, for example: “(3) The recycling process yields a valuable product or intermediate that is, or can be shown to have a replacement value equivalent to a product or intermediate that will be: (i) ...” (underlining indicates suggested additional text for section 261.2(h)(3)).

#### **IV. Request for Comment on a Broader Exclusion for Legitimate Recycling**

**1. Page 61588, Column 1: The preamble introduces another option that could further encourage recycling and reuse and solicits comment on the option and its possible inclusion in the final rule. As presented in the preamble, this option “would provide a broader regulatory conditional exclusion from RCRA regulation for essentially all materials that are legitimately recycled by reclamation, whether the recycling is done within the generating industry, or between industries.” The preamble indicates that the four “legitimacy criteria” (discussion beginning at page 61582, Column 2) would form the basis for evaluating whether a particular recycling practice is legitimate under this broader exclusion approach.**

As previously noted in the General Comments and comments related to the legitimate recycling criteria (Page 61582), DOE supports this option and encourages EPA to pursue this regulatory approach. This proposed broader exclusion would do away with the confusion regarding the assignment of NAICS classifications and recycling in a “continuous process within the same industry.” This approach would provide added flexibility to both generators and recyclers while ensuring adequate protection of human health and the environment. DOE also believes this approach would encourage consultation with the regulators, and thus further reduce the potential for misinterpreting or misapplying the recycling exclusion. A recent DOE example illustrates how this broader exclusion approach could encourage reclamation – in this case, by one industry of a hazardous secondary material generated in another industry – and thus better accomplish the statutory goals of conserving resources and protecting human health and the environment.

In 2001, DOE’s Oak Ridge National Lab (ORNL) and East Tennessee Technology Park (ETTP) were required to dispose of a legacy waste stream, comprised of approximately 37 metric tons (4,000 gallons) of zinc bromide solution (77% pure) that had been used as a neutron shielding material in hot cell windows. The solution was unusable in the windows due to clouding by iron corrosion, and because the zinc bromide could not be

easily clarified it was conservatively declared to be hazardous mixed waste. Subsequently, a potential buyer for the material was located in Galveston, Texas. The potential buyer used a low-purity zinc bromide product to sell to the oil and gas industry for well completion and to help develop and control the flow characteristics of oil and gas wells. In fact, it would have been necessary to “blend down” the ORNL/ETTP solutions in order to meet commercial specifications and concentrations, and thus the solutions were valuable to the potential buyer.

In the case of the example above and under the current proposed rule, such recycling opportunities would continue to be subject to the hazardous waste regulations. The broader exclusion option being considered by EPA (allowing inter-industry recycling) would help further promote recycling and reuse of such materials.

**2. Page 61589, Column 2: The preamble expressed interest "in whether a case-by-case variance mechanism...would be a more appropriate means of providing the type of regulatory relief for reclaimed materials that would flow from a broader exclusion based on legitimate recycling. "**

Because of the delay and administrative burden of filing and successfully obtaining case-by-case variances, DOE does not believe a case-by-case variance approach would be a suitable alternative to the broader exclusion based on legitimate recycling. DOE believes that with the legitimacy criteria, other regulatory restrictions, and general oversight authorities already in place, EPA would have sufficient ability to ensure protection of human health and the environment without including additional “pre-approval” steps for generators and recyclers.

**Proposed Amended Regulation, Part 261**

**1. Page 61597, Column 2: In Appendix X of the proposed rule, paragraph (d) would require that “All other industries are classified using the following categories; these classifications must be made in accordance with the reference document “North American Industry Classification System” or NAICS, effective January 1, 2002.” Paragraph (d) is followed by several footnoted pages listing the NAICS industry classifications for purposes of implementing the proposed 40 CFR 261.2(g).**

If the NAICS approach (for determining if reclamation and reuse is within the same industry) is retained in the final rule, DOE recommends that the extensive Appendix X list of four-digit NAICS classifications not be included in the regulations. DOE suggests that Appendix X only reference the NAICS Manual, list by regulation the specific codes that are disallowed from or otherwise limited in qualifying for waste recycling exclusions under the rule, and include other instructive guidance as may be appropriate for applying the NAICS. This approach would offer a more inclusive standard, allowing generators to presumptively qualify for the exclusion unless specifically excluded through rule changes. Further, DOE is concerned that the NAICS list is subject to periodic revision, and in such cases Appendix X could be reflecting an outdated list. This may create problems for generators and/or receiving facilities that keep current with the revised NAICS classifications, but find they are not covered by an Appendix X listed code. Although this may be less likely at the four-digit classification level, the regulatory status of a

recyclable material could be affected and the generator or receiving facility could find itself in violation of the recycling standards.